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IENNIAL FINANCIAL REPORT

OF THE

Maryland Agricultural College

TO

AUSTIN L. CROTHERS

Governor of Maryland

AND

THE MEMBERS OF THE LEGISLATURE OF

MARYLAND

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FOR

THE SESSION OF 1910

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COLLEGE PARK, MD., February 9, 1910.

His Excellency, Austin L. Crothers,
Governor of the State of Maryland, and
The Honorable, the Members of the Maryland Legislature.

GENTLEMEN:

The following report of the President and Treasurer of the Maryland Agricultural College is herewith submitted for your consideration. A careful study of the same will reveal the scope of the work of this Institution in the interest of advanced agricultural progress in the State of Maryland.

It is a well-recognized fact that the agriculture of a State or Station is the basis of State and National prosperity. Such being the case, it would seem that a liberal policy on the part of the State and nation, would be to foster and promote such *legislation* as would conserve and *render available* the vast amount of plant food now *latent* in the soil.

The only possible plan of accomplishing this most desirable end is to liberally provide for the maintenance of the two Departments now in existence at the Maryland Agricultural College, viz:

(1) The Department of Education.
(2) The Department of Experimentation.

It would be *invidious* to enter upon any discussion as to the relative importance of these two departments. They are so associated that each is necessary to the other. Our nation has realized this fact. It has liberally provided for both institutions by continuing appropriations, and has expressed its expectations that the States will meet the national appropriations in a manner to justify the Government in continuing its support. Many of the States have more than lived up to these expressed and implied obligations. In States where such is the case, agricultural prosperity is in evidence. In many instances the taxable basis has greatly increased, and the income from the land has shown a greater ratio of gain than has the taxable basis.

The permanent nature of the National support in these States has encouraged and developed a State policy of permanent support. Educational institutions cannot prosper under the *vacillating* conditions of annual or biennial appropriations. These institutions should have State support of a permanent character, if they are to be of any continuing value to the interest which they are to serve.

The Executive Committee of the Maryland Agricultural College *views* with much concern the recommendation of the Board of State Aid and *Charities,* to reduce the annual sum of $15,000 for maintenance to $12,500. It is impossible for the Board of Trustees to maintain the buildings of the State in a proper condition, and meet such other expenses as must be paid from State funds with the appropriations available last year. The embarrassment will be still further pro-

nounced when the Board is called upon to meet the expenses for maintenance with an appropriation of $5,000 less than it was for the years of 1908 and 1909.

The disapproval by the Board of State Aid and Charities of the State appropriation for the Experiment Station is a severe blow to the extension of the Horticultural work of the Station. The State aid to the Station will be keenly missed by its large clientele. Most valuable results to the farmers of the State have been attained by use of these appropriations. The loss of this State aid will be severely felt by the Agricultural and Horticultural interests of the State. These appropriations, if granted, would meet with the hearty approval of a large majority of those engaged in general and special agricultural operations.

There are 40,000 farmers in the State. The population of the rural communities is 679,087, and the taxable basis of the rural communities is $340,552,356. The contributions from the treasury of the State for the development of these large interests is merely nominal, when you consider what the State has done for the development of large corporate interests, in its borders. Tax exemption to these organizations is but another name for a direct appropriation from the treasury.

The Agricultural and Horticultural interest of the State is by far the greatest natural resource it possesses. These interests pay taxes on every dollar's worth of property owned. It is *visible*.. Today, throughout the State, millions of dollars worth of property is being protected in safe deposit vaults, and is not contributing one penny to meet the expense of its protection. In view of these conditions, it would seem that the State would lend a helping hand to the development of that interest which is discharging its obligations in full to the State.

What is the State doing to develop these interests? (1) It has appropriated for maintenance of its property the small sum of $15,000 annually—a sum totally inadequate to meet the expenses incident to maintenance. Notwithstanding this condition, the Board of State Aid and Charities has seen fit to recommend the reduction of this sum to $12,500 annually. Is it a good State policy to erect buildings and not maintain them? Certainly no private individual or corporation would be guilty of such a wasteful procedure. (2) The State has appropriated for the State Horticultural Department $8,000 for the suppression of insect pests and plant diseases; for the Experiment Station $10,000 for the work of investigation in agriculture and horticulture.

The Board of State Aid and Charities has seen fit to recommend that this appropriation be discontinued. The total sum appropriated by the State for the development of the Agricultural and Horticultural interest of the State is $24,000. Were it not for the appropriations from the National Government to the support of the Agricultural College and Experiment Station, the State of Maryland would be without these agencies for the development of the agriculture of the State. The only appropriation which the State has made to its Agricultural College is $15,000 annually for maintenance, and appropriations from time to time for buildings to take care of the equipment which the funds arising from the National Grants have provided.

The salaries of all professors engaged in teaching Agriculture and the Mechanic Arts, the English language and the various branches of Mathematics, Physical, Natural and Economic Sciences, with special reference to their application in the industries of life, and to the facilities for such instruction is paid in its entirety from the National Grants.

Of the sums arising from the Nelson and Morrill Acts, 20 per cent. has been set aside for the industrial education of the negro races. The institution doing this work is the Eastern Branch of the Maryland Agricultural College, located at Princess Anne, Somerset County, Maryland. Therefore, the net sum available for use at the Maryland Agricultural College is $45.797.18. Annual State appropriation for four years preceding 1910, $15,000.00.

The Board of State Aid and Charities has recommended that this annual appropriation be reduced to an annual appropriation of $12,500.

The contrast between the National appropriation of $45,797.18, and the proposed State appropriation of $12,500 is striking.

It is true that the State has, from time to time, made appropriations for buildings. This is a necessity. It would be impossible to utilize the facilities for instruction unless buildings were provided for them, and for the increased attendance incident to a good equipment and a strong faculty of instruction. Surely the State of Maryland will not do less than her part in developing this splendid opportunity for her young men seeking a training to take some part in the world's activities.

In view of the facts in the foregoing statement, should the State not supplement these grants in a more liberal manner than it has in times past? There are many items of expense which cannot be paid from either of the National Grants. Among these are repairs and refurnishings; telephone and telegraph services; general expenses; trustees' expenses and library; advertising and insurance; Sunday services; grounds and postage; expenses of commencement; freight and express.

Not one of these expenses can be paid from the Morrill or Nelson Acts. The small appropriation of $15,000 per year is practically consumed in the payment of the foregoing expenses, together with such salaries as cannot be paid from either of the National Grants.

In Section 1 of the Second Morrill Act, the income of the College from the National Grants is as follows:

(1)	Income from sale of public lands	$5,797.18.
(2)	Second Morrill Act, annual appropriation	25,000.00
(3)	Nelson Act, annual appropriation	25,000.00.
Total		$55,797.18

EXPERIMENT STATION.

This Committee views with much concern the recommendation of the Board of State Aid and Charities. This Committee must have been laboring under some misapprehension regarding the work of the Experiment Station. The thought may have occurred to the Committee that the mention of Horticulture at the Station seemed to make the work at the Station overlap he College work. The work of the Experiment Station is that of research.

The work of the College is to take the result of the Experiment Station's work, put it in a teachable form and convey it to the student in the College class room. In other words, the National Grants to the Experiment Station require that the Experiment Station spend the funds arising from these grants in Agricultural Investigation. There is no escape from this requirement.

If the results are to be carried to the farmers of the State in demonstration plots located in each county, then it becomes necessary for the State to bear its share of the expense in conducting this most important branch of Agricultural extension.

This Committee urges upon the Governor of the State, the Senators and Delegates of the Legislature, the importance of continuing the State's appropriation to the Experiment Station. Not to do so will materially interfere with work already commenced in many sections of the State.

The Experiment Station is the instrumentality for solving Agricultural problems. A close co-operation with the farmers is a very valuable asset in bringing about the best results in Agricultural development.

This Committee expresses the views of the Board of Trustees when it says: "The fertility of the soil in Maryland, and the latent powers of its boys and girls are natural resources of the State, of a value which cannot be matched by all other resources combined."

We must voice the sentiment of the Board of Trustees when we say that we are at the beginning of an era of wonderful import in the annals of Agricultural science—an era in which experiment, foresight and skill, invention and learning, will transmute as never before the labor bestowed upon the land into competency, health, happiness and length of days.. An era of progress and development as wonderful as any that has hitherto astounded the world in the Department of investigation and endeavor, is at hand for Agriculture.

The profession will now take its stand side by side with other professions for it is built upon the great fundamental principles which lead to seed time and harvest in every department of Agricultural life.

If Maryland is to have the consummation of this prophecy for her land, her boys and her girls, then her policy of support to her Agricultural College and Experiment Station must be upon a far more liberal plan than it has been in the past.

The Board of Trustees, through its Executive Committee, urges upon the law-making powers of the State a careful consideration of the views set forth in this communication.

CHARLES H. STANLEY, *Chairman,*
F. C. GOLDSBOROUGH,
JOHN HUBERT,
DAVID SEIBERT,
JAMES M. MUNROE.

JANUARY 1, 1910.

Chas. H. Stanley,

Chairman Executive Committee of

Maryland Agricultural College.

SIR—I have herewith the honor of submitting to the Executive Committee of the Maryland Agricultural College, through you, its Chairman, the Biennial Report of the College, to be transmitted by your Honorable Committee to His Excellency, Austin L. Crothers, Governor of Maryland, and to the Maryland Legislature, now in session in the City of Annapolis.

Respectfully,

R. W. SILVESTER,

President of the Maryland Agricultural College.

REPORT OF THE PRESIDENT.

At no period in the history of the world has agriculture received the same consideration which is extended to it today by the law-making powers of the world. In this respect the United States, as a whole, is in the advance guard in this great movement.

Maryland, in this, as in many other great epoch-making periods of our national life, was the first in the field. In 1856 a body of Maryland planters, conceived and brought forth an institution, whose vitalizing principle was the realization that scientific research was necessary to the orderly development of the vocation of agriculture.

To fully comprehend the breadth of vision of these pioneer workers, it is but necessary to read the preamble of the Charter which they secured from the Legislature of Maryland, as shown in Chapter 97, of the Laws of Maryland of 1856:

PREAMBLE.

An Act to establish and endow an Agricultural College in the State of Maryland.

WHEREAS, It has been represented to the Legislature, that certain wise and virtuous citizens are desirous of instituting and establishing in some convenient locality within this State, an Agricultural College and Model Farm, in which the youthful student may especially be instructed in those arts and sciences indispensable to successful agricultural pursuits; and

WHEREAS, It doth appear to this Legislature, that while the wise and learned in the present age hath cultivated with laudable industry, and applied with admirable success the arts and sciences to other pursuits, the most necessary, useful and honorable pursuits of agriculturists have so far been lamentably neglected; and

WHEREAS, It is the province and duty of the Legislature to encourage and aid the philanthropic citizens in their efforts to disseminate useful knowledge, by establishing an Agricultural College and Model Farm, which shall, in addition to the usual course of scholastic training, particularly indoctrinate the youth of Maryland, theoretically and practically, in those arts and sciences, which with good manners and morals, shall enable them to subdue the earth and elevate the State to the lofty position its advantages in soil, climate, etc., and the moral and mental capacities of its citizens, entitles it to attain.

This was the first effort in the Western Hemisphere to use scientific investigation for the advancement of the vocation of Agriculture.

This initiative was followed by the National Grants known as "The First Morrill Act of 1862," "The Hatch Act of 1888," "The Adams Act of 1904," "The Second Morrill Act of 1890," and the Nelson Act of 1906." (See pages 23 to 34 inclusive, of this pamphlet).

Today Agricultural Colleges and Experiment Stations exist in every State, Territory and Dependency of our great country. The power of these institutions is but slightly realized in Maryland. The work they are doing is far-reaching in its effect upon this great basic vocation of mankind. Maryland owes much to the pioneer spirit of her cultured planters, to whose initiative is due the present trend of scientific agriculture.

For illustration as to what is being done by other States for the development of their Colleges and Stations, in comparison to what Maryland is doing for hers, the reader is respectfully referred to page 27 of this pamphlet.

Notwithstanding the meagre support received by the College and Station of Maryland, as shown by these comparisons, they have made remarkable progress in the past eighteen years. This is evidenced from the following data taken from the records of this institution during this period:

PROGRESS AND DEVELOPMENT.

(A) 1. Average annual attendance for the 19 years preceding 1892, 40 students.
2. Average annual attendance for the 19 years following 1892, 201 students.

(B) 1. Value of property in 1892, $68,600.
2. Value of property in 1906, $228,000.

(C) 1. Value of facilities for instruction 1892, $8,000.
2. Value of facilities for instruction 1906, $75,000.

(D) 1. Money appropriated by State for buildings since 1892, $143,000.
2. Value of buildings erected since 1892, $164,000.

(E) Passage of State Fertilizer and Animal Food Inspection Law.

(F) State Horticultural Law for the Control of Insect Pests and Plant Diseases.

(G) Farmers' Institute Law.

Statements "B," "C," "D" and "E" (see pages 9 to 13) gives the sums of money appropriated for these several purposes, and the channels of their expenditure, with other facts, showing the character of the work. Statement "A" (pages 12 to 22 inclusive), shows the receipts from students; from the United States Government Grants; from the State of Maryland; from Sundry Receipts, and from the board of Professors, with the expenditures of the money arising from these sources.

You will note the limitations fixed by the United States Government within which the funds made available by its grants must be expended. (See pages 18 and 19). It is evident from this that the State of Maryland is expected to provide buildings and suitable quarters for students, laboratories, class-rooms, and facilities for instruction, on such a scale as will justify the economical expenditure of the funds thus made available for the employment of a Faculty to instruct students in Agriculture, the Mechanic Arts and their allied branches.

Do Maryland conditions justify the support of such an institution? There can be but one answer to the question, viz: An annual revenue of fifty-five thousand seven hundred and ninety-seven dollars and eighteen cents* to the educational system of the State from the National Government would certainly justify an annual appropriation of twenty thousand dollars on the part of the State, and an additional appropriation from time to time for buildings and repairs, made necessary by the natural development of an Institution whose sole purpose is to train a man to enter the field of man's activities in which technical training is absolutely necessary for success.

Few of us realize that Maryland is an Agricultural State, from the mountains to the sea. In evidence of this assertion, it is desired to append some interesting agricultural statistics, which will demonstrate the accuracy of this statement:

SOME INTERESTING AGRICULTURAL STATISTICS.

	1890	1900	Increase in ten years.
Total acreage	.....	6,310,400	.....
Farm acreage	4,952,390	5,170,075	217,685
Farm acreage improved	3,412.908	3,516,352	103,444
Number of farms	40,798	46,012	5,214
Average acreage	121 acres	112.4 acres	.....
Total population of Maryland	1,042,390	1,188,043	145,654
Total population in Rural District	542,805	596,838	54,033
Value of lands, fences and buildings.	$175,058.550	$175,178,310	$119,760
Value of implements and machinery	$ 6,540,090	$8,611,220	$2,071,130
Value of live stock	$19,194.320	20 855,877	$1,661,557
Total invested capital on farms	$200,792,960	$204,645,407	$3,852,447
Total value of Farm products	$26,443,364	$43,823,419	$17,308,055

Note that the capital invested by the farmers of Maryland has only increased one and one-half per cent. (1½%), whereas, the annual output from the farms has increased sixty-five per cent. This can establish but one conclusion, viz: In the decade ending 1890, the influence of Agricultural Colleges and Experiment Stations was just beginning to be felt by the farmers of Maryland. During the decade ending 1900 the influence had become a power in all matters relating to crop production and animal industry. The magnitude of the influence of this institution upon farming conditions can be appreciated by these results.

*N. B.—This sum represents the income from the National Acts of 1862-1890, and the Act of 1904, when the maximum appropriation of the Nelson Act is attained in the year 1910.

STATEMENT "A."

COLLEGIATE WORK.

Frank R. Kent, in account with the Maryland Agricultural College.

COLLEGE RECEIPTS—1908-1909.

Balance on hand July 1, 1908	$49 08	
U. S. Appropriation	28,000 00	
Maryland Donation	15,000 00	
Interest on Land Script Fund	5,797 17	
Fertilizer and Feed License	11,545 00	
Students' Fees	22,768 42	
Board of Professors and others	1,047 89	
Sundry Receipts	1,565 59	
Interest	6 22	
		$91,779 37

COLLEGE DISBURSEMENTS.

Salaries (all)	$41,621 19	
Domestic Department	14,190 26	
Heating	3,385 98	
Light	772 55	
Laundry	434 13	
Water	502 45	
Freight and Express	912 78	
Postage	567 52	
Telephone and Telegraph	417 33	
Trustees' Expenses	1,519 42	
Sundry Expenses	4,160 11	
Repairs and Refurnishings	4,616 78	
Grounds	822 47	
Advertising, Insurance and Taxes	2,257 44	
Student Rebates	406 39	
Medical Expense	229 09	
Supplies for Students	1,427 11	
Commencement Expenses	583 00	
Athletic Association	1,334 49	
Library	969 55	
Lectures and Special Courses	45 33	
College Educational Department	10,040 35	
Balance on hand July 1, 1909	570 65	
		$91,779 37

This account has been examined for each item in detail by auditor sent by State Treasurer, and full report filed with the State Treasurer at the close of each College year. For more detailed information see this report in Treasurer's Office. You will find auditor's certificate of correctness attached to report, which covers every Department.

STATEMENT B.

Frank R. Kent, Treasurer, in Account With the Maryland Agricultural College.

Account of Analysis of Commercial Fertilizers.

RECEIPTS 1908-1909.

Fertilizer Licenses	$10,485 00
Feed Licenses	1,060 00
	$11,545 00

DISBURSEMENTS, 1908-1909.

Salary of State Chemist	$ 2,500 00	
Salaries of Assistants and Janitors	4,791 70	
Expenses in Chemical Laboratory	4,253 30	
		$11,545 00

This account has been examined for each item in detail by auditor sent by State Treasurer, and full report filed with the State Treasurer at the close of each College year. For more detailed information see this report in Treasurer's Office. You will find auditor's certificate of correctness attached to report, which covers every Department.

The farmers of the State spend over two and one-half millions of dollars in fertilizers annually. Another one million and a half for mixed feeds and by-products is spent for their stock. Such an outlay from the proceeds of their vocation needs the State's aid in giving them a guarantee of the quality of goods purchased. That the operation of this law is satisfactory to the farmers of the State is evidenced by a demand from them upon the *Chemical Department for twenty-five thousand copies of the College Quarterly with each issue.*

It will be noted that during the fall of 1909 and the spring of 1908, two thousand three hundred and seventy-five samples of fertilizers were collected by agents of the Chemical Department, and twelve hundred of these were analyzed. It is gratifying to find so few of these goods below the guarantee given by the manufacturers.

Food samples collected by agents and employees of the Chemical Department number two hundred and seventy, and are found in Bulletin No. 28 an Bulletin No. 30.

Many of our farmers today, through information they have received from this Department, are as well qualified to discuss fertilizers and their values from analyses made as any fertilizer agent or commercial chemist. Thousands of farmers are students of these Bulletins, and use them in their purchases. You will note that any man of average intelligence can make comparisons with the goods of every dealer in the State, draws his conclusions, and act accordingly.

STATEMENT C.

STATE WORK.

Frank R. Kent, in Account with the Maryland Agricultural College.

STATE HORTICULTURAL DEPARTMENT.

RECEIPTS 1908-1909.

Balance July 1, 1908	$748 37	
State Appropriation	*12,000 00	
Sundry Receipts	843 42	
		$13,591 79

DISBURSEMENTS.

Salaries of State Officers	$ 2,000 00	
Salaries of Assistants and Stenographers	2,340 00	
Expenses Conducting Department	4,395 21	
Balance July 1, 1909	4,056 58	
		$13,591 79

*NOTE—$4,000 of this is part of appropriation 1909-1910. The average appropriation is $8,000. The balance of $4,056.58 carries the Department to April 1, 1910.

This account has been examined for each item in detail by auditor sent by State Treasurer, and full report filed with the State Treasurer at the close of each College year. For more detailed information see this report in Treasurer's Office. You will find auditor's certificate of correctness attached to report, which covers every Department.

STATE HORTICULTURAL DEPARTMENT.

The work of this Department has been conducted as vigorously as possible with the funds at its command.

A striking illustration of the great aid of a so-called crop pest department occurred last spring, when the officers of this department found that the nests of the Brown Tail Moth was being imported in numbers on all imported trees and plants. It is, indeed, fortunate that the State was in position to act immediately in the protection of her agricultural and horticultural interests by the inspection of all the imported trees and plants to prevent as far as possible the escape of this, the most destructive, and otherwise dangerous, insect pest that the country has had introduced into her domain. In all, about 1,150,000 seedlings, plants and trees were inspected, and about 700 nests of the Brown Tail Moth were found and destroyed. The escape of this insect in several parts of the State would have presented a problem of insect extermination of an exceedingly serious nature. During this past season over $500,000.00 has been expended in the New England States for the control of the Gypsy and Brown Tail Moths.

Another pest, known as the Peach Lacanium, has developed during the past year. Unless controlled, it will produce serious injury in the peach orchards of the State. The officers of the department are conducting experiments with the hope of securing an effective remedy for the insect.

By means of the excellent work of the twenty local inspectors appointed after being given a course of instruction by the officers of the Department at the College, 2,444,584 orchard trees have been inspected during the years of 1908 and 1909, as shown by the following table:

County	No. apple trees inspected.	No. peach tree inspected.	No. pear trees inspected.	No. other trees inspected.	No. trees with scale.	No. of orchards visited.
Allegany	82,621	47,083	18,188	2,218	178	129
Anne Arundel.	1,511	13,142	429	72	274	55
Baltimore	11,279	2,042	4,684	189	1,968	164
Caroline	15,558	136,408	12,987	3,344	10,636	225
Calvert	110	86,680	250	50	583	139
Cecil	1,385	3,633	1,750	...	1,549	26
Charles	15,515	14,341	11,111	450	1,416	365
Carroll	45,120	16,335	5,134	7,044	5,380	205
Dorchester ...	16,560	23,515	370	...	7,933	288
Frederick	83,999	57,088	9,266	48,701	21,690	1,357
Garrett	25,842	2,009	1,267	1,274	1,125	350
Howard	27,016	35,115	1,200	957	1,402	394
Harford	47,327	10,292	10,720	1,938	5,551	658
Kent	10,110	174,410	84,750	2,490	14,335	163
Montgomery ..	39,763	15,966	3,480	7,299	1,952	770
Prince George.	102,369	66,204	29,206	5,344	3,330	426
Queen Anne...	16,942	225,322	8,705	698	44,807	332
St. Mary.....	12,287	10,190	1,225	385	700	228
Somerset	17,447	28,845	5,055	1,006	9,946	395
Talbot	13,918	15,931	1,780	9,568	4,816	687
Washington ..	146,946	239,008	8,356	8,366	222,352	1,273
Wicomico	13,975	38,450	580	150	1,670	102
Worcester	17,312	18,210	3,410	1,515	9,415	462
Total	669,121	1,468,452	205,933	101,078	485,010	9,368

The enforcement of the law by treatment of this unusually large number of trees for scale, and the removal of many thousand peach trees with yellows, aside from disseminating other horticultural information to the owners, indicates the great benefit of this work to the State.

It is believed that the personal contact method is the best means of disseminating information. By means of local inspection of orchards the inspectors are enabled to have personal interviews with the growers in their own orchards, and thus such pests as occur may be pointed out and information regarding their control given. However, the present funds of the Department will only permit the inspection of approximately 25 per cent. of the State each year, and thus a reinspection in a comparatively short time to ascertain if the instructions to negligent growers have been carried out is not possible. This no doubt accounts for the existence of a number of neglected cases standing as a menace to the neighborhood, and the officers have no definite information of them. At least two inspections should take place each year.

All complaints that are made to the officers are immediately investigated, and the State Horticultural Law enforced if necessary.

Among the professional orchardists today, there is no fear that they will be unable to control both the yellows and San Jose scale. They realize that it is perfectly possible to do this, and they ask that the negligent grower be prevented by the State authorities from maintaining a center of contagion and infection in their midst. Their position is a correct one, and they should have the protection of the State in the enforcement of the law.

Public sentiment is strongly in favor of a strict enforcement of the Horticultural Law, and is demanding a closer inspection of the orchards of the State.

THE OSAGE HEDGE PROBLEM.

The officers of the Department have recently commenced a campaign against the Osage Orange Hedge, which abounds throughout the State, serving as a favorable means for breeding and distributing the San Jose scale. Aside from the fact, that not an Osage hedge in the State has been observed that was not infested with scale, it is believed that this hedge should be removed from our Maryland farms for other important and economical reasons.

NURSERY INSPECTION.

The annual inspections of the nurseries of the State have been conducted as heretofore, this phase of the Department's work alone requiring much time and personal attention of the State Entomologist and Pathologist, and chief assistants. As an illustration of the quantity of nursery stock to be inspected at some of our largest nurseries, I beg to state that the annual output from three of them exceeds 15,000,000 trees and plants, while the approximate estimate of trees and plants sold from Maryland nurseries annually is beyond the enormous amount of 35,000,000.

An average of fifty nursery certificates have been issued during the past two years. Certificates are issued to nurserymen, after their strict compliance with rules of the department as to disposition of nursery stock.

This work has proved of great advantage in raising the standard of nursery stock in the State. The requirement that nothing but nursery stock which is apparently free from insect pests and plant diseases can be sold.

The nurserymen extend cordial support to the Department, and as a whole support the officers' efforts to see that the fruit growers of this as well as of adjoining States receive nothing but good marketable stock.

PUBLIC SPRAYERS.

The conducting of public sprayers is one of the most popular and beneficial phases of work that this department has inaugurated during the past two years. Twenty-five public sprayers have been operated in different parts of the State. Several cases could be cited where public sprayers are being conducted in a private manner resulting from the inauguration of the work by this Department. These public sprayers have furnished immediate relief in saving badly infested fruit trees in many of our towns and villages.

SPRAYING DEMONSTRATIONS ON ALMSHOUSE FARMS.

Aside from the operation of public sprayers, this Department has conducted public demonstrations of spraying for insect pests and plant diseases on several Almshouse Farms in the State, as well as in selected orchards in other parts of the State. The people of the vicinity were invited to attend the spraying in the spring, and also the picking of fruit in the fall in order to observe the method of application and the greatly increased amount of salable fruit that results from the treatment. The policy of conducting these demonstrations on this Almshouse Farms is considered a good one, as the Almshouse Farms are public property, and the best farming practice should be in operation on these farms for the observation of the farmers of the county.

INVESTIGATIONAL WORK.

Experiments have been conducted by the officers of the Department, with a view of securing more information on the habits and means of control of various insects and plant diseases. The results are being published from time to time through Experiment Station Bulletins.

Among the main subjects under investigation are the following: Disease-carrying insects; test of spray mixtures for San Jose scale; peach Lacanium scale; Codling Moth; Peach Tree Borer; Dipping of nursery Trees in Various Solutions; Apiculture; Peach Yellows; Unidentified Peach and Apple Diseases; Effect of Various Fungicides Upon Plants, and Physiological Studies of Plants.

The following bulletins have been written by the officers and assistants, and were sent through the Experiment Station during the past two years: Bulletin No. 127, "Miscellaneous Greenhouse Notes," by A. B. Gahan; 130, "Nurseries and Nursery Inspection," by T. B. Symons, J. B. S. Norton and C. P. Close; 131, "Treatment for the San Jose Scale," by T. B. Symons; 134, "Brown Tail Moth, House Fly, Mosquito," by T. B. Symons; 137, "The Anjoumois Grain Moth," by T. B. Symons; 140, "The San Jose Scale and Osage Orange Hedge," by T. B. Symons and L. M. Peairs; 142, "The Codling Moth," by T. B. Symons and L. M. Peairs.

It is believed that the information disseminated by correspondence, addresses before farmers' organizations, and visits in different parts of the State by these men, is largely in excess of what should have been expected, in view of the small amount of money furnished by the State for this purpose.

The horticultural interests, to be protected by the management of this Department represents an annual value sold from the orchards, truck fields and vineyards of nearly eleven millions of dollars. The protection of these interests by the State from insect pests and plant diseases has cost the State one and one-fourteenth of one per cent. of the value of this product.

The balance shown of July 1, 1907, was for the support of the Department to October 1, 1907.

The Act creating this Department was first passed at the session of the Legislature in 1896, was revised and amended by the session of 1898, and is to be found in its present form in the Acts of the Legislature of 1898, Chapter 289.

STATEMENT "D."

JULY 1, 1908—JULY 1, 1909.

FARMERS' INSTITUTE.

RECEIPTS.

Balance July 1, 1908	$8 64	
October 25th—State Appropriation	3,000 00	
February 1st—State Appropriation	3,000 00	
May 3rd—Interest	6 95	
		$6,015 59
Salaries, Director	$1,500 00	
Treasurer	37 24	
Lectures and Services	1,241 15	
Typewriting	553 47	
Postage	63 72	
Travel and Expenses	1,353 37	
Supplies and Printing	414 05	
Telephone	53 75	
Railroad Charges	495 92	
	$5,712 67	
Balance, July 11, 1909	302 92	$6,015 59

This cash balance is required to support the Department for the months of July, August and September. The College year is from July 1 to July 1, while the State year is from October 1 to October 1.

This account has been examined for each item in detail by auditor sent by State Treasurer, and full report filed with the State Treasurer at the close of each College year. For more detailed information see this report in Treasurer's Office. You will find auditor's certificate of correctness attached to report, which covers every Department.

The law creating the Farmers' Institute was passed during the session of the Legislature of 1896. The Act creating it is found in the Laws of Maryland, page 135, Chapter 102. This law was amended at the session of the Legislature of 1904. See Chapter 557, page 950.

This State work has been helpful in introducing into Maryland many new and progressive ideas from other States. The lectures of Van Alstyne, of New York; of Wing, on Alfalfa and Sheep Breeding; of Rice, from New York, on Poultry, and of Shamel, of Illinois, on Corn Breeding, have each and all let ideas which have found an abiding place in many minds on the farms of Maryland.

The railroad and steamboat lines appreciate the value of Institutes held in the sections through which they pass. This is evidenced by the Western Maryland and Pennsylvania Railroad furnishing free transportation and a special train to convey Institute workers to points on their roads, for the purpose of carrying the principles of scientific agriculture to their patrons. *The managers of these roads realize that*

it pays them to educate the people engaged in agricultural pursuits. So fully has this been demonstrated in the West and in the Dominion of Canada, that the public carriers of these sections, during the month of June, conduct free excursions from the farms of the different sections of the Province to the grounds of the Agricultural Colleges and Experiment Stations, for the purpose of having their patrons witness the success which attends the application of science to seed selection, breeding, planting, culture, harvesting and marketing of crops, as well as the breeding, feeding and care of all forms of live stock.

We look to an early appreciation of this business principle on the part of all railroad and steamboat lines in Maryland.

On the Western Maryland Special, 1,138 patrons were met.

On the Maryland and Pennsylvania Railroad Special, 969 patrons were met.

STATEMENT "E."

EASTERN BRANCH, COLORED INDUSTRIAL SCHOOL.

Frank R. Kent, in Account with the Eastern Branch.

RECEIPTS 1908-1909.

The United States	$7,000 00

DISBURSEMENTS.

Pay of Teachers	$4,332 99	
Text-books and materials for Instruction	2,407 90	
Balance July 1, 1909:		
(Credited to General Fund)	259 11	$7,000 00

This account has been examined for each item in detail by auditor sent by State Treasurer, and full report filed with the State Treasurer at the close of each College year. For more detailed information see this report in Treasurer's Office. You will find auditor's certificate of correctness attached to report, which covers every Department.

The Second Morrill Act provides in its First Section (see page 25), that "no money shall be paid out under this Act to any State or Territory for the support and maintenance of a College where a distinction of race or color is made in the admission of students, but the establishment and maintenance of such College separately for white and colored students, shall be held to be a compliance with the provisions of this Act, if the funds received in such State or Territory be equitably divided as hereinafter set forth."

Now, the Board of Trustees of the Maryland Agricultural College made a division of the funds arising from this Act between the colored and the white population on the basis of the division of State funds for public education.

Therefore, twenty per cent. of the $25,000, or $7,000 annually is set aside for the training of the colored population of Maryland, and the said seven thousand dollars is placed to the credit of the "Princess

Anne" Academy," now known as the Eastern Branch of the Maryland Agricultural College, located at Princess Anne, Somerset County, Maryland.

While the Trustees of the Agricultural College reserve the seven thousand dollars inviolate for the use of the said Institution, they reserve at the same time the right to pay out this money only upon the order of the agent of said Institution, when such exenditure comes within the limitations of said Act. This could not be otherwise, as the warrant conveying the funds to the State of Maryland is made out to the Maryland Agricultural College, and said corporation is responsible for the expenditure of the full sum to the National Government. The President, or some other officer of the Maryland Agricultural College, makes an annual visit of inspection to the Institution. On the occasion of the last visit, work was in evidence which seemed to indicate that the spirit and letter of the law was being complied with, so far as the expenditure of the said five thousand dollars was concerned.

STATEMENT "F."

STATE WORK.

Frank R. Kent, in Account with the MarylandAgricultural College.

TOBACCO INVESTIGATION.

Balance, July 1, 1908		$3,515 87
Sundry Receipts		141 12
		$3,656 99

DISBURSEMENTS, 1908-1909.

Salary of Special Agent	$1,500 00	
Office Expenses and Travel	393 89	
Balance July 1, 1909	1,763 10	
		$3,656 99

This account has been examined for each item in detail by auditor sent by State Treasurer, and full report filed with the State Treasurer at the close of each College year. For more detailed information see this report in Treasurer's Office. You will find auditor's certificate of correctness attached to report, which covers every Department.

TOBACCO STATEMENT.

Deliveries	1903	1904	1905	1906	1907
Domestic	2020	2427	1718	3723	4323
Foreign	31280	35610	32750	26796	17755
Total	33300	38037	34468	30492	22078
Receipts	35034	36263	33644	30774	21363

The above figures give the total net receipts, and deliveries of the Maryland tobacco for the years 1903-1904-1905-1906-1907.

The Domestic and Foreign deliveries are given separately; it is curious to see how the Domestic market has changed for the better since the Maryland Agricultural College, through its representative, began looking after the market in 1906. In 1907 the only Foreign market that took materially less tobacco than in 1906 was France. Holland a small decrease. Other markets increased their purchase.

The French purchases are entirely controlled by the Regie so it is impossible for us to directly reach them. The effort has been to increase the demand of the *Domestic Trade,* which would bring in the factor of competition and then thus produce a better return for the native product. The result of the effort speaks for itself in the above tabulation. It is worthy of consideration.

STATEMENT "G."

THE DEFICIENCY OF INTEREST ON FIRST MORRILL ACT.

The First Morrill Act appropriated public lands to each of the States of the National Government for the purpose of organizing Agricultural and Mechanical Colleges in their borders. The appropriation of land was made on the basis of representation in the National Congress; so many acres for each Representative in the National Government. The proceeds of this sale of these lands was to be accepted by the States as a permanent endowment for the said Institutions, the State to become responsible for the same, being preserved undiminished, and further to guarantee an income on the endowment of at least five per cent. (See First Act in this pamphlet, Section 4, page ..).

The State of Maryland sold her lands for $115,943.60, and for years kept these funds invested so as to produce at least the income required. The endowment is now invested at three per cent. The Legislature of 1904 provided for the deficiency of two per cent.

It bcomes necessary, at this time, to again make such provision. In accepting this trust, the State of Maryland accepts its accompanying obligations. Should the Legislature fail to make provision for this interest, the United States Government would no doubt withdraw its endowment.

$115,943.60 at two per cent. interest, amounts to $2,318.97; wherefore an appropriation to the Maryland Agricultural College of $2,318.97 for the years 1907 and 1908 is necessary, to provide against a breach of contract on the part of the State. Your attention is especially called to the matter, and it is recommended that an annual appropriation be made to cover this deficiency by this Legislature at its present session. The present Legislature should make the same provision for the years 1909 and 1910.

GENERAL UNITED STATES ACTS

IN RELATION TO

Agricultural Colleges and Experiment Stations

THE LAND-GRANT ACT OF 1862—OR "FIRST MORRILL ACT."

(United States Statutes, Vol. 12, Chap. 130, P. 503.)

An Act donating Public Lands to the Several States and Territories which may provide Colleges for the benefit of Agriculture and the Mechanic Arts.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled: That there be granted to the several States, for the purpose hereinafter mentioned, an amount of public land, to be apportioned to each State a quantity equal to thirty thousand acres for each Senator and Representative in Congress, of which the States are respectively entitled by the apportionment under the census of eighteen hundred and sixty; provided, that no mineral lands shall be selected or purchased under the provisions of this Act.

SEC. 2. And be it further enacted: That the land aforesaid, after being surveyed, shall be apportioned to the several States in sections or subdivisions of sections, not less than one-quarter of a section; * * * said scrip to besold by said States, and the proceeds thereof applied to the uses and purposes prescribed in this Act, and for no other use or purpose whatsoever. * * *

SEC. 4. And be it further enacted: That all moneys derived from the sale of the lands aforesaid, by the States to which the lands are apportioned, and from the sales of land scrip hereinbefore provided for *shall be invested in stocks of the United States, or of the States, or some other safe stocks, yielding not less than five per centum upon the par value of said stock; and that the moneys so invested shall constitute a perpetual fund, the capital of which shall remain forever undiminished (except so far as may be provided in Section fifth of this Act), and the interest of which shall be inviolably appropriated by each State, which may take and claim the benefit of this Act, to the endowment, support and maintenance of at least one College where the leading object shall be,* without excluding other scientific and classical

studies, and including military tactics, to teach such branches of learning as are related to agriulture and the mechanic arts, in such manner as the Legislatures of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life.

SEC. 5. And be it further enacted, That the grant of land and land scrip hereby authorized shall be made on the following conditions, to which, as well as to the provisions hereinbefore contained, the previous assent of the several States shall be signified by legislative Acts.

FIRST. If any portion of the fund invested, as provided by the foregoing section, or any portion of the interest thereon, shall, by any action or contingency, be diminished or lost, it shall be replaced by the State to which it belongs, so that the capital of the fund shall remain forever undiminished; and the annual interest shall be regularly applied without diminution to the purposes named in the fourth section of this Act, except that a sum not exceeding ten per centum upon the amount received by any State under the provisions of this Act, may be expended for the purchase of lands for sites or experimental farms, whenever authorized by the respective Legislatures of said States.

Second. No portion of said fund, nor the interest thereon, shall be applied, directly or indirectly, under any pretense whatever, to the purchase, erection, preservation or repair of any building or buildings.

THIRD. Any State which may take and claim the benefit of the provisions of this Act shall provide within five years, at least not less than one College as described in the fourth section of this Act, or the grant to such State shall cease; and said State shall be bound to pay the United States the amount received of any lands previously sold, and that the title to purchasers under the State shall be valid.

FOURTH. An annual report is to be made regarding the progress of each College, recording any improvements and experiments made, with their costs and results, and such other matters, including State industrial and economical statistics, as may be supposed useful; and one copy of which shall be transmitted by mail free, by each, to all the other Colleges which may be endowed under the provisions of this Act, and also one copy to the Secretary of the Interior.

SIXTH. No State while in a condition of rebellion or insurrection against the Government of the United States shall be entitled to the benefit of this Act.

Approved July 2, 1862.

(PUBLIC—No. 249.)

An Act to apply a portion of the proceeds of the public lands to the more complete endowment and support of the Colleges for the benefit of agriculture and the mechanic arts established under the provisions of an Act of Congress approved July second, eighteen hundred and sixty-two.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That there shall be, and hereby is, annually appropriated, out of any money in the Treasury not otherwise appropriated, arising from the sales of public lands,

to be paid as hereinafter provided, to each State and Territory for the more complete endowment and maintenance of Colleges for the benefit of agriculture and the mechanic arts now established, or which may be hereafter established in accordance with an Act of Congress approved July second, eighteen hundred and sixty-two, the sum of fifteen thousand dollars for the year ending June thirtieth, eighteen hundred and ninety, and annual increase of the amount of such appropriation thereafter for ten years by an additional sum of one thousand dollars over the preceding year, and the annual amount to be paid thereafter to each State and Territory shall be *twenty-five thousand dollars, to be applied only to instruction in agriculture, the mechanic arts, the English language and various branches of mathematical, physical, natural and economic science, with special reference to their applications in the industries of life, and to the facilities for such instruction; provided, that no money shall be paid out under this Act to any State or Territory for the support and maintenance of a College where a distinction of race or color is made in the admission of students, but the establishment and maintenance of such Colleges separately for white and colored students shall be held to be a compliance with the provisions of this Act, if the funds received in such State or Territory be equitably divided as hereinafter set forth.* Provided, That in any State in which there has been one College established in pursuance of the Act of July second, eighteen hundred and sixty-two, and also in which an educational institution of like character has been established, or may be hereafter established, and is now aided by such State from its own revenue, for the education of colored students in agriculture and the mechanic arts, however named or styled, or whether or not it has received money heretofore under the Act to which this Act is an amendment, the Legislature of such State may propose and report to the Secretary of the Interior a just and equitable division of the fund to be received under this Act between one College for white students, and one institution for colored students established as aforesaid, which shall be divided into two parts, and paid accordingly, and thereupon such institution for colored students shall be entitled to the benefits of this Act, and subject to its provisions, as much as it would have been if it had been included under the Act of eighteen hundred and sixty-two, and the fulfillment of the foregoing provisions shall be taken as a compliance with the provisions in reference to separate colleges for white and colored students.

SEC. 2. That the sums hereby appropriated to the States and Territories for the further endowment and support of Colleges shall be annually paid on or before the thirty-first day of July of each year, by the Secretary of the Treasury, upon the warrant of the Secretary of the Interior, out of the Treasury of the United States, to the State or Territorial Treasurer, or to such officer as shall be designated by the laws of such State or Territory to receive the same, who shall, upon the order of the Trustees of the College, or the institution for colored students, immediately pay over said sums to the treasurers of the respective Colleges, or other institutions entitled to receive the same, *and such treasurers shall be required to report to the Secretary of Agriculture and to the Secretary of the Interior, on or before the first day of September of each year, a detailed statement of the amount so re-*

cived and of its disbursement. The grants of moneys authorized by this act are made subject to the legislative assent of the several States and Territories to the purpose of said grants: Provided, That payments of such installments of the appropriation herein made as shall become due to any State before the adjournment of the regular session of Legislature meeting next after the passage of this Act shall be made upon the assent of the Governor thereof, duly certified to the Secretary of the Treasury.

SEC. 3. *That if any portion of the moneys received by the designated officer of the State or Territory for the further and more complete endowment, support and maintenance of Colleges, or of institutions for colored students, as provided in this Act, shall, by any action or contingency be diminished or lost, or be misapplied, it shall be replaced by the State or Territory to which it belongs, and until so replaced no subsequent appropriation shall be apportioned or paid to such State or Territory; and no portion of said moneys shall be applied, directly or indirectly, under any pretense whatever, to the purchase, erection, preservation or repair of any building or buildings.* An annual report by the President of each of said Colleges shall be made to the Secretary of Agriculture, as well as to the Secretary of the Interior, regarding the condition and progress of each College, including statistical information in relation to its receipts and expenditures, its library, the number of its students and professors, and also as to any improvements and experiments made under the direction of any Experiment Stations attached to said Colleges, with their costs and results, and such other industrial and economical statistics as may be regarded as useful, one copy of which shall be transmitted by mail free to all other Colleges further endowed under this Act.

SEC. 4. That on or before the first day of July in each year after the passage of this Act, the Secretary of the Interior shall ascertain and certify to the Secretary of the Treasury as to each State and Territory whether it is entitled to receive its share of the annual appropriation for colleges, or of institutions for colored students, under this Act, and the amount which thereupon each is entitled, respectively, to receive. If the Secretary of the Interior shall withhold a certificate from any State or Territory of its apporpriation, the facts and reasons therefor shall be reported to the President, and the amount involved shall be kept separate in the Treasury until the close of the next Congress, in order that the State or Territory may, if it should so desire, appeal to Congress from the determination of the Secretary of the Interior. If the next Congress shall not direct such sum to be paid, it shall be converted into the Treasury. And the Secretary of the Interior is hereby charged with the proper administration of this law.

SEC. 5. That the Secretary of the Interior shall annually report to Congress the disbursements which have been made in all the States and Territories, and also whether the appropriation of any State or Territory has been withheld, and if so, the reasons therefor.

SEC. 6. Congress may at any time amend, suspend or repeal any or all of the provisions of this Act.

Approved August 30, 1890.

The Nelson Act.

An Act to provide for an increased annual appropriation for the Colleges for the benefit of agriculture and the mechanic arts, established and maintaned under the provisions of the Act of Congress approved July second, eighteen hundred and sixty-two, and the Act of Congress approved August thirtieth, eighteen hundred and ninety.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress Assembled, That there shall be, and hereby is, annually appropriated, out of any money in the Treasury not otherwise appropriated, to be paid as hereinafter provided, to each State and Territory for the more complete endowment and maintenance of Agricultural Colleges now established, or which may hereafter be established, in accordance with the Act of Congress approved July second, eighteen hundred and sixty-two, and the Act of Congress approved August thirtieth, eighteen hundred and ninety, the sum of five thousand dollars, in addition to the sums named in the said Acts, for the fiscal year ending June thirtieth, nineteen hundred and eight, and an annual increase of the amount of such appropriation thereafter for four years by an additional sum of five thousand dollars over the preceding year, and the annual sum to be paid thereafter to each State and Territory, shall be fifty thousand dollars, to be applied only for the purposes of the Agricultural Colleges as defined and limited in the Act of Congress approved July second, eighteen hundred and sixty-two, and the Act of Congress approved August thirtieth, eighteen hundred and ninety.

Sec. 2. That the sum hereby appropriated to the States and Territories for the further endowment and support of the Colleges shall be paid by, to *and in the manner prescribed by the Act of Congress approved August thirtieth, eighteen hundred and ninety, entitled,* "An Act to apply a portion of the proceeds of the public lands to the more complete endowment and support of the Colleges for the benefit of agriculture and the mechanic arts established under the provisions of the Act of Congress approved July second, eighteen hundred and sixty-two," *and the expenditure of the said money shall be governed in all respects by the provisions of the said Act of Congress* approved July second, eighteen hundred and sixty-two, and the said Act of Congress approved August thirtieth, eighteen hundred and ninety: *Provided, That said Colleges may use a portion of this money for providing courses for the special preparation of instructors for teaching the elements of agriculture and the mechanic arts.*

Sec. 3. *That Congress may at any time amend, suspend or repeal any or all of the provisions of this Act.*

The Hatch Act.

(By resolution of the Board of Control of the Maryland Agricultural College, adopted July 14th, 1892, the College and Experiment Station were placed under separate executive officers, and the annual appropriation of $15,000, carried by the "Hatch Act," was devoted entirely to the Experiment Station. The College received no part of it.)

An Act to establish Agricultural Experiment Stations in connection with the Colleges established in the several States under the provisions of an Act approved July second, eighteen hundred and sixty-two, and of the Acts supplementary thereto.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress Assembled, That in order to aid in acquiring and diffusing among the people of the United States useful and practical information on subjects connected with agriculture, and to promote scientific investigation and experiment respecting the principles and applications of agricultural science, there shall be established, *under direction* of the College or Colleges or agricultural department of Colleges in each State or Territory established, or which may hereafter be established, in accordance with the provisions of an Act approved July second, eighteen hundred and sixty-two, entitled, "An Act donating public lands to the several States and Territories which may provide *colleges for the benefit of agriculture,* and the *mechanic arts,*" or any of the supplements to said Act, a department to be known and designated as an "Agricultural Experiment Station;" *Provided,* That in any State or Territory in which two such Colleges have been or may be so established the appropriation hereinafter made to such State or Territory shall be equally divided between such Colleges, unless the Legislature of such State or Territory shall otherwise direct.

Sec. 2. That it shall be the object and duty of said Experiment Station to conduct original researches or verify experiments on the physiology of plants and animals, the diseases to which they are severally subject, with the remedies for the same; the chemical composition of useful plants at their different stages of growth; the comparative advantages of rotative cropping as pursued under a varying series of crops; the capacity of new plants or trees for acclimation; the analysis of soils and water; the chemical composition of manures, natural or artificial, with experiments designed to test their comparative effects on crops of different kinds; the adaptation and value of grasses and forage plants; the composition and digestibility of the different kinds of food for domestic animals; the scientific and economic questions involved in the production of butter and cheese; and such other researches and experiments bearing directly on the agricultural industry of the United States as may in each case be deemed advisable, having due regard to the varying conditions and needs of the respective States or Territories.

SEC. 3. That in order to secure, as far as practicable, uniformity of methods and result in the work of said Stations, it shall be the duty of the United States Commissioner of Agriculture to furnish forms, as far as practicable, for the tabulation of results of investigation or experiments, to indicate from time to time, such lines of inquiry as to him shall seem most important; and, in general, to furnish such advice and assistance as will best promote the purposes of this Act. *It shall be the duty of each of said Stations annually, on or before the first day of February, to make to the Governor of the State or Territory in which* it is located a full and detailed report of its operations; including *statement of receipts and expenditures, a copy of which report shall be sent to each of said Stations, to the Commissioner of Agriculture, and to the Secretary of the Treasury of the United States.*

SEC. 4. That bulletins or reports of progress shall be published at said Stations at least once in three months, one copy of which shall be sent to each newspaper in the State or Territories, in which they are respectively located, and to such individuals actually engaged in farming as may request the same, and as far as the means of the Station will permit. Such bulletins or reports, and the annual reports of said Stations, shall be transmitted in the mails of the United States free of charge for postage, under such regulations as the Postmaster-General may from time to time prescribe.

SEC. 5. That for the purpose of paying the necessary expenses of conducting investigations and experiments and printing and distributing the results as hereinbefore prescribed, the sum of fifteen thousand dollars per annum is hereby appropriated to each State, to be specially provided for by Congress in the appropriations from year to year, and to each Territory entitled under the provisions of section eight of this Act, out of any money in the Treasury proceeding from the sales of public lands, to be paid in equal quarterly payments, on the first day of January, April, July and October of each year, to the Treasurer or other officer duly appointed by the governing boards of said Colleges to receive the same, the first payment to be made on the first day of October, eighteen hundred and eighty-seven; *Provided, however, That out of the first annual appropriation so received by any Station an amount not exceeding one-fifth may be expended in the erection, enlargement or repair of a building or buildings necessary for carrying on the work of such Station; and thereafter an amount not exceeding five per centum of such annual appropriation may be expended.*

SEC. 6. That whenever it shall appear to the Secretary of the *Treasury from the annual statement of receipts and expenditures of any of said Stations, that a portion of the preceding annual appropriation remains unexpended, such amount shall be deducted from the next succeeding annual appropriation, to such Station, in order that the amount of money appropriated to any Station shall not exceed the amount actually and necessarily required for its maintenance and support.*

SEC. 7. *That nothing in this Act shall be construed to impair or modify the legal relations existing between any of the said Colleges and the government of the States or Territories in which they are respectively located.*

SEC. 8. That in States having Colleges entitled under this section to the benefits of this Act, and having also Agricultural Experiment Stations established by law separate from said Colleges, such States shall be authorized to apply such benefits to experiments at stations so established by such States; and in case any State shall have established, under the provisions of said Act of July 2, aforesaid, an Agricultural Department or Experiment Station, in connection with any University, College or Institution not distinctively an Agricultural College or school, and such State shall have established or shall hereafter establish a separate Agricultural College or School, which shall have connected therewith an experimental farm or Station, the Legislature of such State may apply in whole or *in part the appropriation by this Act made, to such separate Agricultural College or school* (*and no Legislature shall by control, express or implied, disable itself from so doing*).

SEC. 9. *That the grants of moneys authorized by this Act are made subject to the legislative assents of the several States and Territories to the purposes of said grant; Provided, That payment of such installments of the appropriation herein made as shall become due to any State before the adjournment of the regular session of its Legislature meeting next after the passage of this Act shall be made upon the assent of the Governor thereof, duly certified to the Secretary of the Treasury.*

SEC. 10. Nothing in this Act shall be held or construed as binding the United States to continue any payments from the Treasury to any or all the States or Institutions mentioned in this Act, but Congress may at any time amend, suspend or repeal any or all the provisions of this Act.

Approved March 2, 1887.

THE ADAMS ACT.

An Act to provide for an increased annual appropriation for Agricultural Experiment Stations and regulating the expenditure thereof.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress Assembled, That there shall be, and hereby is, annually appropriated, out of any money in the Treasury not otherwise appropriated, to be paid as hereinafter provided, to each State and Territory for the more complete endowment and maintenance of Agricultural Experiment Stations now established, or which may be hereafter established, in accordance with the Act of Congress approved March second, eighteen hundred and eighty-seven, the sum of five thousand dollars for the year ending June thirtieth, nineteen hundred and five, and an annual increase of the amount of such appropriation thereafter for five years by an additional sum of two thousand dollars over the preceding year, and the annual amount to be paid thereafter to each State and Territory shall be fifteen thousand dollars, *to be applied only to paying the necessary expenses of conducting original researches or experiments bearing directly* on the

agricultural industry of the United States, having due regard to the varying conditions and needs of the respective States or Territories.

SEC. 2. That the sums hereby appropriated to the States and Territories for the further endowment and support of Agricultural Experiment Stations shall be annually paid on or before the thirty-first day of July of each year by the Secretary of the Treasury, upon the warrant of the Secretary of Agriculture, out of the Treasury of the United States, to the treasurer or other officer duly appointed by the governing boards of said Experiment Stations to receive the same, *and such officers shall be required to report to the Secretary of Agriculture on or before the first day of September of each year a detailed statement of the amount so received, and of its disbursement, on schedules prescribed by the Secretary of Agriculture. The grants of money authorized by this Act are made subject to legislative assent of the several States and Territories to the purpose of said grants; Provided, That payments of such installments of the appropriation herein made as shall become due to any State before the adjournment of the regular session of Legislature meeting next after the passage of this Act shall be made upon the assent of the Governor thereof, duly certified by the Secretary of the Treasury.*

SEC. 3. That if any portion of the moneys received by the designated officer of the State or Territory for the further and more complete endowment, support and maintenance of Agricultural Experiment Stations, as provided in this Act, *shall by any action or contingency be diminished or lost, or be misapplied, it shall be replaced by the State or Territory to which it belongs, and until so replaced no subsequent appropriation shall be apportioned or paid to such State or Territory; and no portion of said moneys shall be applied directly or indirectly under any pretense whatever to the purchase, erection, preservation or repair of any building or buildings, or to the purchase or rental of land. A detailed annual report, by the director or other officer in charge of each of said Experiment Stations, shall be made to the Secretary of Agriculture on or before the first day of November of each year regarding the operations and progress of each Experiment Station, including statistical information in relation to its receipts, expenditures, and facilities, with the cost of researches and experiments, and such other industrial and economical statistics as may be regarded as useful or may be called for by the Secretary of Agriculture.*

SEC. 4. *That on or before the first day of July in each year after the passage of this Act the Secretary of Agriculture shall ascertain and certify to the Secretary of the Treasury as to each State and Territory whether it is complying with the provisions of this Act, and is entitled to receive its share of the annual appropriation for Agricultural Experiment Stations under this Act, and the amount which thereupon each is entitled, respectively, to receive. If the Secretary of Agriculture shall withhold a certificate from any State or Territory of its appropriation, the facts and reasons therefor shall be reported to the President, and the amount involved shall be kept separate in the Treasury until the close of the next Congress, in order that the State or Territory may, if it should so desire, appeal to Congress from the determination of the Secretary of Agriculture. If the next Congress shall not direct such sum to be paid, it shall be converted into the*

Treasury; and the Secretary of Agriculture is hereby charged with the proper administration of this law.

SEC. 5. *That the Secretary of Agriculture shall make an annual report to Congress on the receipts and expenditures and work of the Agricultural Experiment Stations in all the States and Territories, and also whether the appropriation of any State or Territory has been withheld, and if so, the reasons therefor.*

SEC. 6. *That Congress may at any time amend, suspend or repeal any or all of the provisions of this Act.*

The attention of Your Excellency, and that of the members of the Legislature of Maryland, is directed to the provisions of the National Congress as to the expenditures of the funds made available by these Acts. It will be noted that the beneficiaries of these Acts are not permitted to expend one dollar of these funds for purposes other than are specifically enumerated in these National statutes. In the Hatch Act, Section 5, provision is made for the expenditure of ten per cent. the first year's apportionment, and five per cent. thereafter for building and repairs. In no other section of any of these Acts is there any warrant for the expenditure of one dollar for such purposes. In fact, such expenditures are prohibited under penalties expressed in these laws. The National Government makes these appropriations for the benefit of the agricultural in the United States, and at the same time demands of the States and Territories to provide buildings, lands and their maintenance (See Paragraph 2, Section 5, Act of 1862, and Section 3, Act of 1890) if the States or Territories desire to avail themselves of the funds arising from these Acts. It will be noted that the administrators of these trusts are to see to it that the funds from these Acts are expended *only for instruction in agriculture, the mechanic arts, the English language, and the various branches of mathematics, physical culture and economical science, with special reference to their application in the industries of life, and to the facilities for such instruction.* (See Act of 1890, Par. 1.)

These contributions on the part of the National Government are: 1—for educational purposes, and 2—for scientific investigation and contributions to the educational system of the State, well worth the most careful consideration of the State officers and the members of its Legislature. In these grants two features are emphasized: 1—the educational factor, and 2—the scientific investigation feature, which adds so largely to the body of knowledge of the agricultural and engineering fields of human endeavor.

The attention of the Governor and Members of the Legislature is earnestly invited to the comparison here shown.

State or Territory.	State Aid.	
	1904.	1905.
	Appropriation for Current Expenses.	Appropriation for Current Expenses.
Alabama (Auburn)	$ 24,321.43	$ 15,848.02
Alabama (Normal) Colored	.....	4,000.00
Arizona	21,998.68	17,113.85
Arkansas (Fayetteville)	58,582.63	14,590.00
Arkansas (Pine Bluff) Colored	5,025.00	3,789.00
California	.....	359,000.00
Colorado	75,410.21	59,592.89
Connecticut	20,425.00	15,000.00
Delaware (Newark)	.....	.....
Delaware (Dover)	.....	.....
Florida (Lake City)	45,863.02	.....
Florida (Tallabassee) Colored	1,000.00	2,000.00
Georgia (Athens)	.....	.....
Georgia (College)	.....	8,000.00
Idaho	21 500.00	21,500.00
Illinois	250 000.00	175,000.00
Indiana	70,363.80	66,950.00
Iowa	80.000.00	60,000.00
Kansas	40,000.00	30,000.00
Kentucky (Lexington)	.....	.....
Kentucky (Frankfort)	8,000.00	8,000.00
Louisiana (Baton Rouge)	15,000.00	15,000.00
Louisiana (New Orleans)	10,000.00	10,000.00
Maine	20,000.00	25,000 00
Maryland (College Park)	**15,000 00**	**15,000.00**
Maryland (Princess Anne) Colored	.....	.....
Massachusetts (Amherst)	21,000.00	33,000.00
Massachusetts (Boston)	25.000.00	25,0 0.00
Michigan	.....	b60,000.00
Minnesota	187,029.68	187.518.00
Mississippi (Agricultural College)	65,946.36	48,272.41
Mississippi (Westside) Colored	8.000.00	8,000.00
Missouri (Columbia)	174,078.62	11,500.00
Missouri (Jefferson City)	22.175.00	22,175.00
Montana	15,000.00	15,000.00
Nebraska	40,000.00	37,250.00
Nevada	15 207.23	21.250.00
New Hampshire	10,500.00	10,500.00
New Jersey	2,500.00	2,500.00
New Mexico	13,456.66	5,652.10
New York	.....	.....
North Carolina (Raleigh)	10,000.00	10,000.00
North Carolina (Greensboro) Colored	7,500.00	7,500.00
North Dakota	29,178.82	26,592 02
Ohio	.....	229.463.11
Oklahoma (Stillwater)	16,721.50	6,603.03
Oklahoma (Langston)	17,317.98	17,000.00
Oregon	6,169.05	13,434.94
Pennsylvania	52,000.25	42,228.87
Rhode Island	15,000.00	15,000.00
South Carolina (Clemson College)	127,437.44	85,200.00
South Carolina (Orangeburg) Colored	.....	.....
South Dakota	31,500.00	26,500.00
Tennessee	.....	.....
Texas (College Station)	60,000.00	25,000.00
Texas (Prairieview)	20,500.00	20,500.00
Utah	32,650.00	26,000.00
Vermont	6,000.00	6,000.00
Virginia (Blacksburg)	29,999.99	40,000.00
Virginia (Hampton)	.....	.....
Washington	55,000.00	55,000.00
West Virginia (Morgantown)	90,049.94	97,050.00
West Virginia (Institute)	11,600.00	1.600.00
Wisconsin	327,000.00	289.000.00
Wyoming	10,497.27	22,175.20
Total	2,332,485.56	2,469,848.44
Average annual appropriation for Current Expenses of all States for their Agricultural Colleges	**35,884.00**	**37,997.00**
Maryland annual appropriation for Current Expenses	**15.000.00**	**15,000.00**

In view of these comparisons, can the law-making power of the State expect those to whom it has entrusted the management of the affairs of the Maryland Agricultural College to show results comparable to those which are in evidence in other States, when so meagre a State appropriation has been made for conducting the affairs of their State Agricultural College?

All of which is respectfully submitted to the Executive and law-making powers of the State for their most careful examination and earnest consideration.